

Supplemental Table A1. Mineral norm (%) of the Jindong migmatite

Sample	Type	Qz	Kfs	Pl	Bt	Ms	Ap
YK17-053a	M	33.36	11.00	34.00	16.20	5.00	0.45
YK17-054	M	37.28	8.00	33.04	12.30	9.00	0.38
YK17-055a	M	32.66	0.50	42.00	23.80	0.50	0.54
YK17-056	M	36.00	4.00	42.00	15.83	2.00	0.17
YK17-058a	M	36.12	1.50	42.00	18.90	1.00	0.49
YK21-2	M	36.00	3.00	37.02	12.60	11.00	0.38
YK21-3	M	35.00	2.00	39.58	15.00	8.00	0.42
YK21-4	M	40.00	3.86	36.00	12.40	7.50	0.24
YK21-5	M	37.00	1.03	41.00	16.50	4.00	0.47
YK21-6	M	39.00	0.80	41.38	11.00	7.50	0.32
YK21-7	N-L	36.86	37.00	16.00	4.00	6.00	0.14
YK21-8	N-L	41.84	20.00	26.00	2.20	9.83	0.13
YK21-9	N-L	38.91	26.00	22.00	3.10	9.83	0.16
YK21-10	N-L	37.00	37.98	18.00	1.90	5.00	0.12
YK21-11	N-L	35.00	34.50	23.82	1.55	5.00	0.14
YK21-12	N-L	38.84	32.00	20.50	3.50	5.00	0.16
YK21-13	N-L	37.51	24.00	26.00	2.35	10.00	0.14
YK17-059	N-L	38.00	24.00	27.00	1.80	9.00	0.20
YK17-060	N-L	37.36	24.00	27.50	1.10	9.83	0.21
YK21-15	L-L	34.16	38.00	17.00	2.70	8.00	0.14
YK21-16	L-L	32.26	36.00	19.00	1.60	11.00	0.14
YK21-17	L-L	33.94	40.00	15.00	1.90	9.00	0.17
YK21-18	L-L	34.54	41.00	17.00	2.30	5.00	0.13
YK21-19	L-L	37.37	33.00	17.00	1.50	11.00	0.13
YK17-055b	L-L	41.00	31.00	13.50	4.50	9.90	0.16
YK17-057	L-L	56.26	22.00	11.20	4.50	5.88	0.17
YK17-058b	L-L	28.68	46.00	13.00	5.00	7.00	0.32

Note: The mineral assemblage is calculated based on major elements of samples with errors less than 5% for most major elements. Proportion of Ap in leucosome samples are calculated based on average composition of Ap in melanosome sample YK17-56 (Supplemental Table A7) with assumption that apatite is the major host of P, which represent the amount of dissolved Ap during melting process. Abbreviations: Bt = biotite; Ms = muscovite; Pl = plagioclase; Kfs = K-feldspar; Qz = quartz; Ap = apatite; M = melanosome; L-L = lenticular leucosome; N-L= net-structured leucosome.